



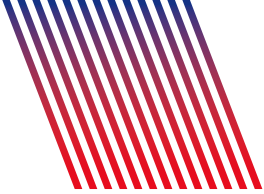
**Intelligent
Laser**

LASER VISION SEAM TRACKING SYSTEM



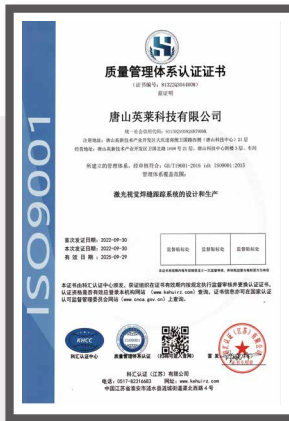
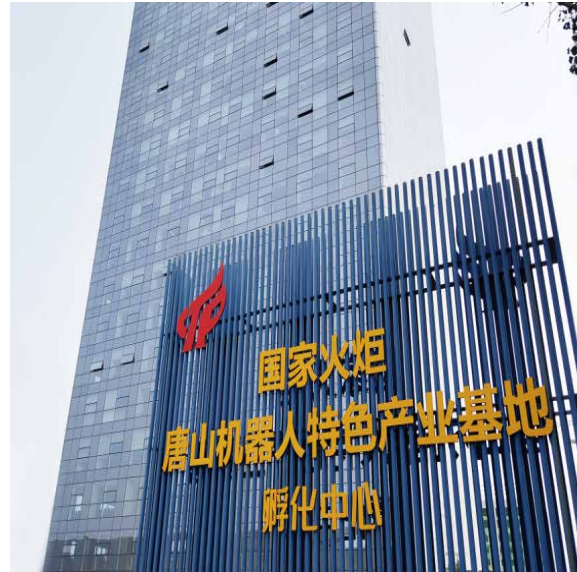
MAKE THE ROBOT MORE ACCURATE, EFFICIENT AND RELIABLE

TANGSHAN YINGLAI TECHNOLOGY CO.,LTD



INTELLIGENTLASER

TANGSHAN YINGLAI TECHNOLOGY CO.,LTD was founded in 2013, and our headquarters is located in Tangshan high-tech zone, Hebei province. The company's main business is the research and development, production and sales of laser vision system. At the same time, it provides intelligent solutions for industrial robots or special automatic machines in the fields of welding, cutting, handling, assembling, grinding, spraying, etc. We also provide corresponding design, development, process test, system integration, technical consultation and other comprehensive services. Intelligentlaser will always adhere to the concept of Self-reliance, Honesty, Solidity, and Innovation. Also, we not only provide independent research and development, but also efficient and reliable products. Our vision is to create value for users and dedicate ourselves to the development of intelligent equipment for industry.



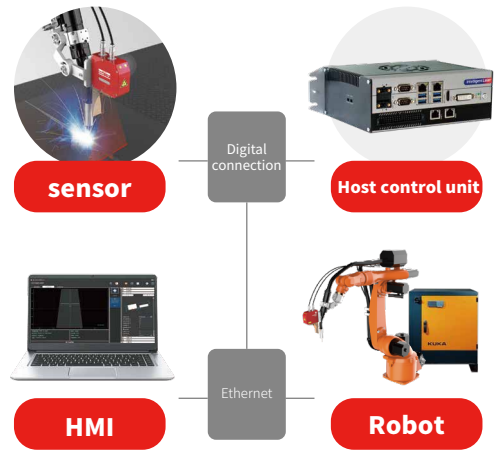
HONOR & QUALIFICATION

Intelligentlaser has so far obtained more than 90 national invention patents, utility model patents, appearance design patents, computer software copyright registration certificates, etc., and has obtained "National High-tech Enterprises", "Hebei Science And Technology Small And Medium-sized Enterprises" and "Chinese Robots Industry Alliance Member Unit", "Unit of China Welding Association", "China Machine Vision Industry Alliance Member Unit", "National Torch Tangshan Robot Featured Industrial Base".



LASER VISION SEAM TRACKING SYSTEM

Laser vision seam tracking system is mainly composed of a laser sensor and a host control unit. The laser sensor is used for activating the collection of the seam information. The host control unit is responsible for real-time processing of seam information, and keep real-time communication with industrial robots or special welding machines. Correct the programmed path of the robot or special machine during welding to ensure that the weld is accurately deposited on the joint.



- Seam tracking ✓
- Seam finding ✓
- Pre-Scanning ✓
- Adaptive welding ✓

SUPPORT DIVERSIFIED COMMUNICATION

Laser vision seam tracking system can be seamlessly connected with the world's mainstream robots, PLCs or motion controllers, plug and play, without secondary development, and without complex configuration.

SUITABLE FOR VARIOUS WELDING PROCESSES

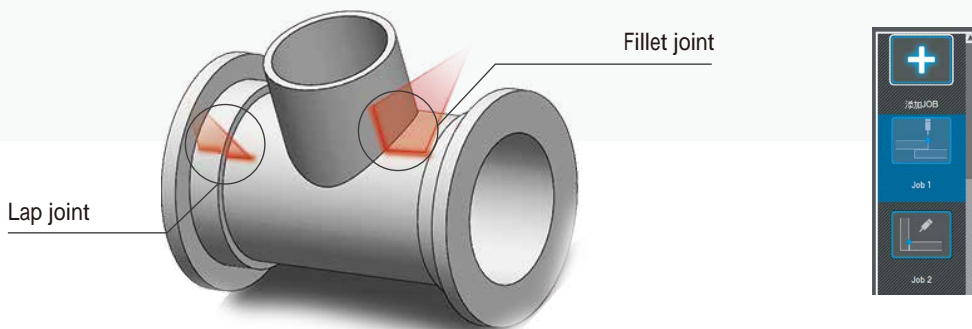
- MAG
- MIG
- TIG
- SAW
- LBW
- PAW
- FSW

USER-FRIENDLY SOFTWARE CUTEWELDER



PERFECT JOB MANAGEMENT SYSTEM

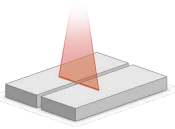
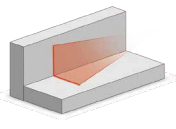
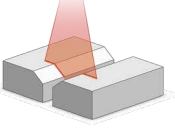
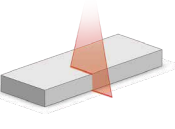
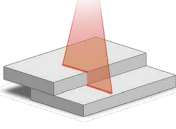
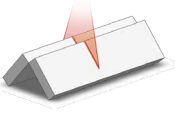
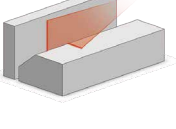
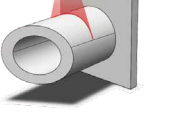

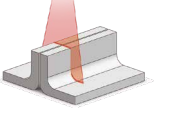
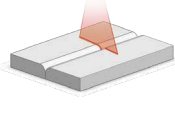
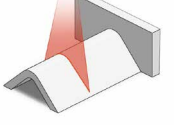
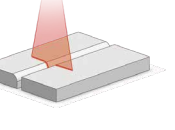

A workpiece contains different types of joints, so different inspection parameters are required for targeted inspection. The JOB system supports 99 sets of welding seam detection parameters (support customization). The welding seam detection parameters are updated in real-time according to the robot welding process, and the operation is flexible and convenient.



The abundant job parameters can adjust relevant parameters according to the requirements of the on-site working environment. Also, they can manage different seam settings and retain the inspection parameters under each working condition. The profile and seam parameters can be displayed in real-time. Our CUTEWELDER can record the joint image data, and then simulate it in offline mode.

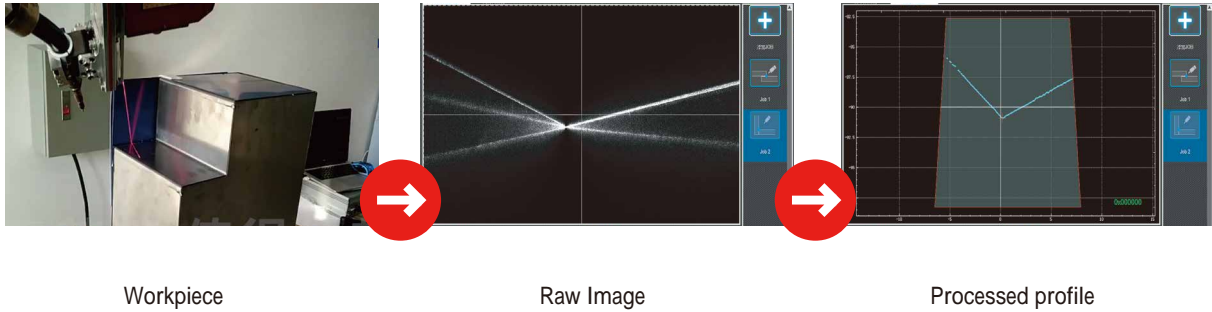
SUPPORT THE DETECTION OF MULTIPLE SEAM TYPES

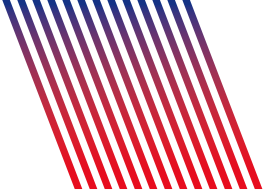
The technical team of Intelligent Laser Technology has more than 8 years of experience in the development of joints identification algorithms, and has established a complete algorithm library, which basically realizes full coverage of welding joints. At the same time, we can provide customers with customized algorithm development services.

STANDARD SEAM TYPES				
 BUTT JOINT	 FILLET JOINT	 V-GROOVE JOINT	 FLAT JOINT	 LAP JOINT
NON STANDARD SEAM TYPES				
 CORNER JOINT	 INCLINED HALF V-GROOVE JOINT	 CIRCLE PIPE JOINT	 PIPE BUTT JOINT	 EDGE JOINT
 FLARE BUTT JOINT	 CURVED CORNER	 HALF FLARE BUTT JOINT	 SUPPORT CUSTOMIZATION	

STRONG ANTI-INTERFERENCE PERFORMANCE

For high reflective workpieces (such as stainless steel, aluminum alloy, polished metal, etc.), our optical design and anti-reflective algorithm can stably extract their the profile, and accurately locate the feature points of the seam. Moreover, with the help of our parameters, we can eliminate the effect of multiple reflections of light on accurate measurement to measure more stably.





HIGH PERFORMANCE LASER SENSOR



PRODUCT ADVANTAGES

COMPACT

The product has high integration, compact design and easy disassembly and assembly.

RELIABLE INTERNAL STRUCTURE DESIGN

Reliable internal structure design makes it work efficiently in various complex and harsh industrial production environments.

Professional electrical protection design makes it suitable for various high-frequency electromagnetic and electrostatic industrial production environments.

The misoperation to the sensor can be avoided by setting the operation mode from the software.

STRONG ANTI-INTERFERENCE

The algorithm applied in the product can effectively suppress the interference caused by arc and splash.

Reliable optical structure and anti-reflective algorithm can effectively suppress various types of reflective interference.

FLEXIBLE AND DIVERSE

Various series of the products for different materials and welding processes.

Both sides installation from back and side makes it quick for the image configuration.

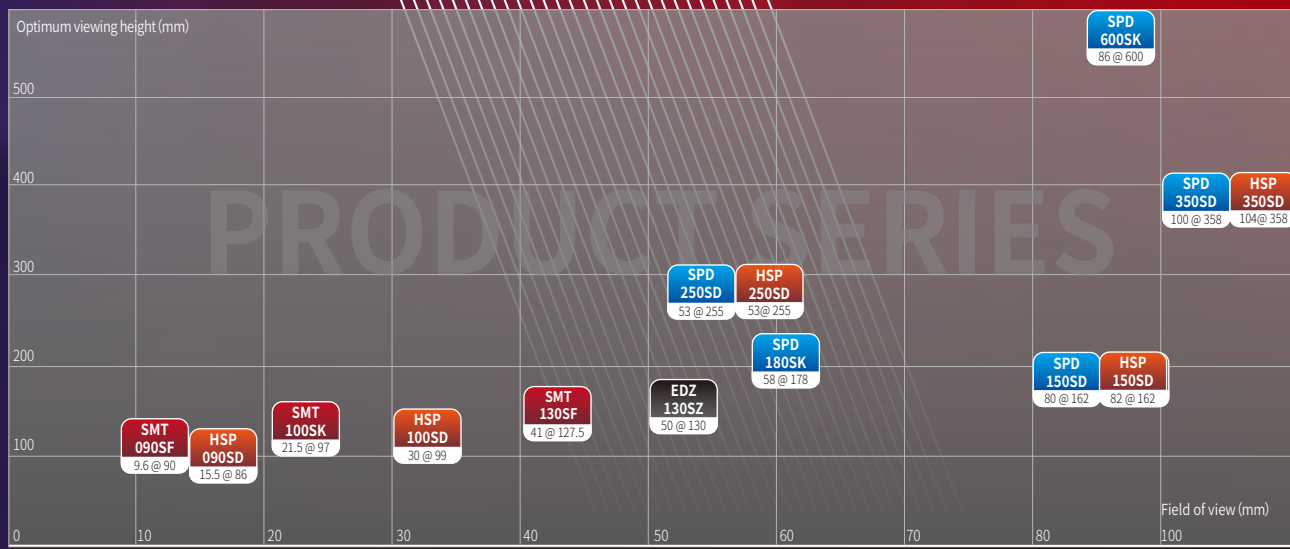
Customization for non-standard structure is available.

LASER SENSOR PARAMETERS

Four main series
more than ten products
to cope with different working conditions

SMT | HSP | SPD | EDZ

Wide range of products



IL-SMT Product parameters

System model	IL-SMT-090S	IL-SMT-100S	IL-SMT-130S
Sensor model	IL-SMT-090SF	IL-SMT-100SK	IL-SMT-130SF
Laser level	IIIB	IIIB	IIIB
Optimum viewing height (mm)	90	97	127.5
Depth of filed (mm)	12	57	117
Working distance (mm)	84 ~ 96	81 ~ 138	91 ~ 208
Field of view (mm)	9.6 @ 90	21.5 @ 97	41@ 127.5
Minimum gap (mm)	0.08	0.1	0.2
Dimensions (mm)	112 X 118 X 41	91 X 87.3 X 42.5	75 X 97 X 41
Frame rate	75 @ FullView, Up to 450fps	75 @ FullView, Up to 450fps	75 @ FullView, Up to 450fps
Weight (kg)	0.72	0.6	0.57
Operating temperature ()	5 ~ 40	5 ~ 40	5 ~ 40
Protection level	IP65 (customizable IP67)	IP65 (customizable IP67)	IP65 (customizable IP67)
Supportable installation locations	back / side	back / side	back / side
Parameter annotation			

*Consult your hardware manual for the mounting holes



IL-HSP Product parameters

System model	IL-HSP-090S	IL-HSP-100S	IL-HSP-150S
Sensor model	IL-HSP-090SD	IL-HSP-100SD	IL-HSP-150SD
Laser level	IIIB	IIIB	IIIB
Optimum viewing height (mm)	86	99	162
Depth of filed (mm)	11	30	170
Working distance (mm)	81 ~ 92	86 ~ 116	109 ~ 279
Field of view (mm)	15.5 @ 86	30 @ 99	82 @ 162
Minimum gap (mm)	0.08	0.2	0.4
Dimensions (mm)	120 X 121 X 41	95 X 84.5 X 41	79 X 79.5 X 41
Frame rate	60 @ FullView, Up to 230fps	60 @ FullView, Up to 230fps	80 @ FullView, Up to 230fps
Weight (kg)	0.76	0.43	0.38
Operating temperature ()	5 ~ 40	5 ~ 40	5 ~ 40
Protection level	IP65 (customizable IP67)	IP65 (customizable IP67)	IP65 (customizable IP67)
Supportable installation locations	back / side	back	front / back / side
Parameter annotation			



*Consult your hardware manual for the mounting holes

IL-HSP Product parameters

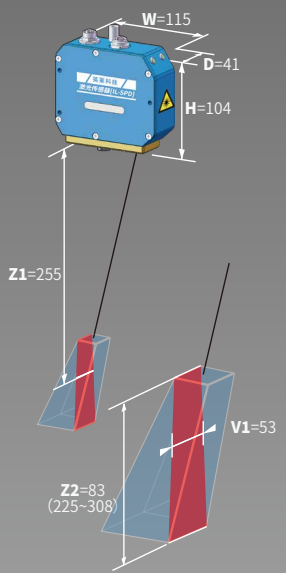
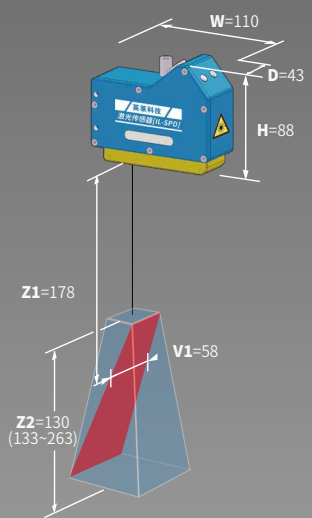
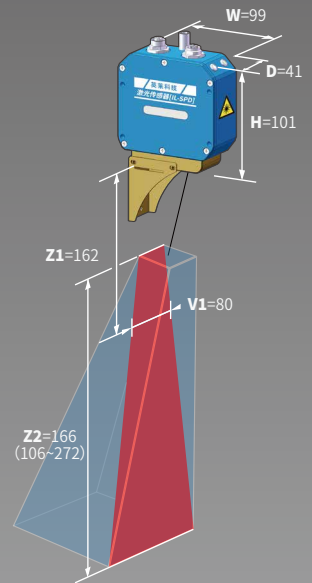
System model	IL-HSP-250S	IL-HSP-350S
Sensor model	IL-HSP-250SD	IL-HSP-350SD
Laser level	IIIB	IIIB
Optimum viewing height (mm)	255	358
Depth of filed (mm)	83	377
Working distance (mm)	225~308	258~635
Field of view (mm)	53 @ 255	104 @ 358
Minimum gap (mm)	0.5	0.8
Dimensions (mm)	92X 81.5X 41	97 X 84.5 X 41
Frame rate	45 @ FullView, Up to 120fps	45 @ FullView, Up to 120fps
Weight (kg)	0.39	0.39
Operating temperature ()	5 ~ 40	5 ~ 40
Protection level	IP65 (customizable IP67)	IP65 (customizable IP67)
Supportable installation locations	back / side	back / side
Parameter annotation	<p>W=92 D=41 H=81.5 Z1=255 V1=53 Z2=83 (225~308)</p> <p>激光辐射 勿直视光束</p>	<p>W=97 D=41 H=84.5 Z1=358 V1=104 Z2=385 (250~635)</p>

*Consult your hardware manual for the mounting holes

IL-SPD Product parameters

System model	IL-SPD-150S	IL-SPD-180S	IL-SPD-250S
Sensor model	IL-SPD-150SD	IL-SPD-180SK	IL-SPD-250SD
Laser level	IIIB	IIIB	IIIB
Optimum viewing height (mm)	162	178	255
Depth of filed (mm)	166	130	83
Working distance (mm)	106 ~ 272	133~ 263	225 ~ 308
Field of view (mm)	80 @ 162	58 @ 178	53 @ 255
Minimum gap (mm)	0.5	0.6	0.5
Dimensions (mm)	99 X 101 X 41	110 X 88 X 43	115 X 104 X 41
Frame rate	60 @ FullView, Up to 120fps	60 @ FullView, Up to 120fps	45 @ FullView, Up to 120fps
Weight (kg)	0.66	0.68	0.73
Operating temperature ()	5 ~ 40	5 ~ 40	5 ~ 40
Protection level	IP65 (customizable IP67)	IP65 (customizable IP67)	IP65 (customizable IP67)
Supportable installation locations	back / side	back / side	back / side

Parameter annotation



*Consult your hardware manual for the mounting holes

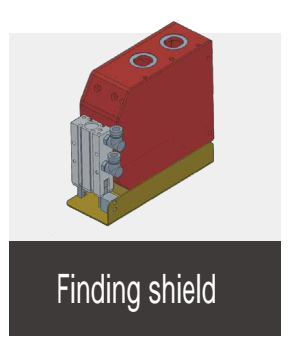
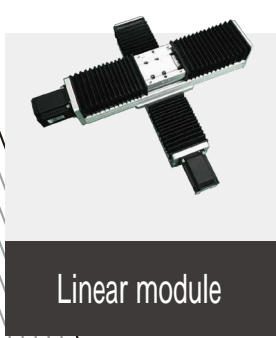
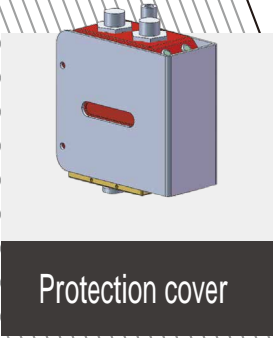
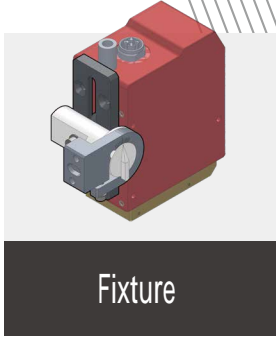
IL-EDZ Product parameters

System model	IL-SPD-350S	IL-SPD-600S	IL-EDZ-130S
Sensor model	IL-SPD-350SD	IL-SPD-600SK	IL-EDZ-130SZ
Laser level	III B	III B	III B
Optimum viewing height (mm)	358	600	130
Depth of filed (mm)	377	256	94
Working distance (mm)	258 ~ 635	498 ~ 754	88 ~ 182
Field of view (mm)	100 @ 358	86 @ 600	50 @ 130
Minimum gap (mm)	0.7	0.8	0.5
Dimensions (mm)	115 X 107X 41	133.5 X 97 X 44	73 X 108 X 40
Frame rate	45 @ FullView, Up to 120fps	60 @ FullView, Up to 120fps	30 @ FullView, Up to 120fps
Weight (kg)	0.66	0.65	0.43
Operating temperature ()	5 ~ 40	5 ~ 40	5 ~ 40
Protection level	IP65 (customizable IP67)	IP65 (customizable IP67)	IP65 (customizable IP67)
Supportable installation locations	back / side	side	side
Parameter annotation			

*Consult your hardware manual for the mounting holes

PARTS INTRODUCTION

OPTIONAL ACCESSORIES



Rich R&D tests to ensure the reliability of products in the application site



Frequent test



High-voltage insulation test



Protection test



Shake test



High-low temperature test



Cable fatigue test



ESD test



Dimension testing



Precision testing



Mechanic performance testing



Anti-aging test



TYPICAL CASES



ENGINEERING MACHINERY



STEEL WORK



PIPES & VESSELS



PRESSURE VESSEL



VEHICLE



SHEET METAL



POWER EQUIPMENT



DEFENSE

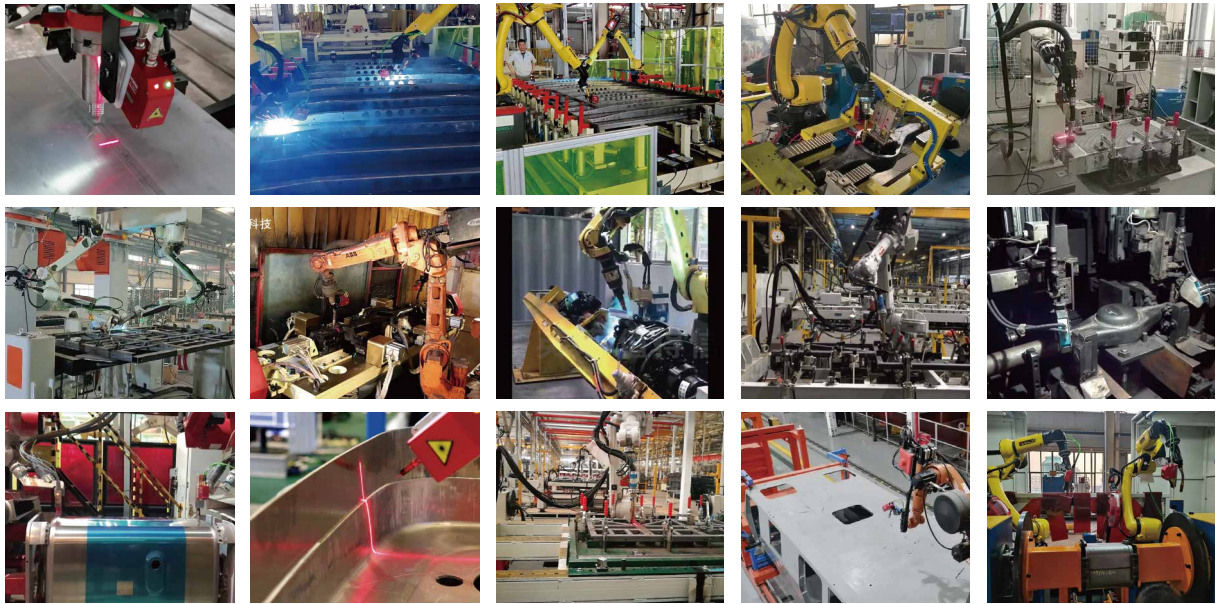
ENGINEERING MACHINERY



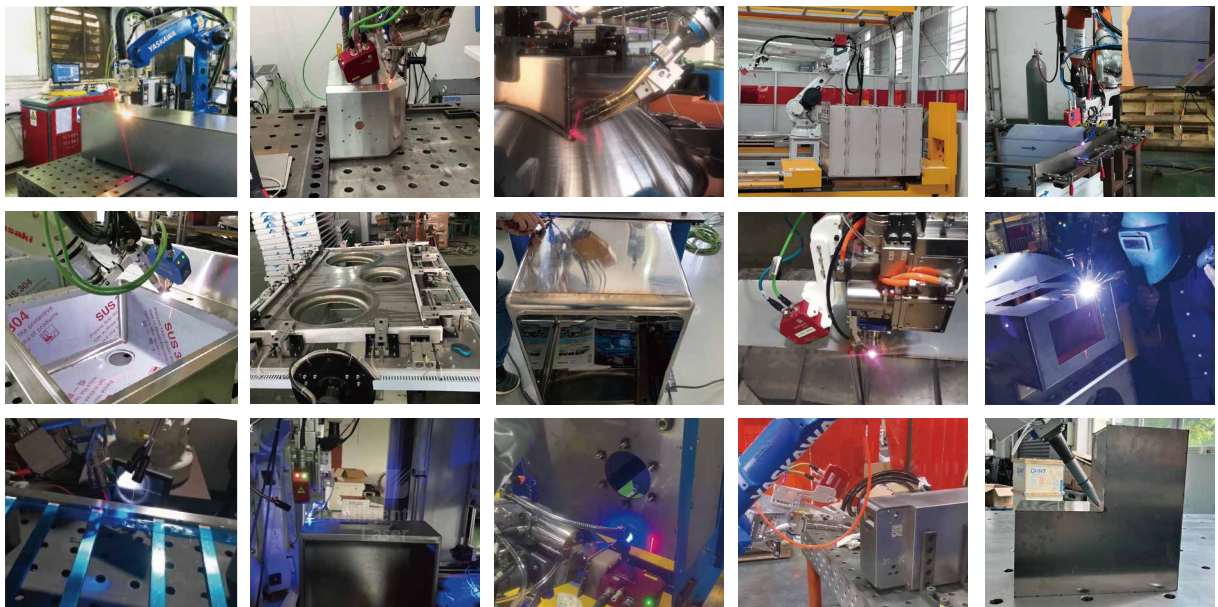
STEEL WORK



VEHICLE



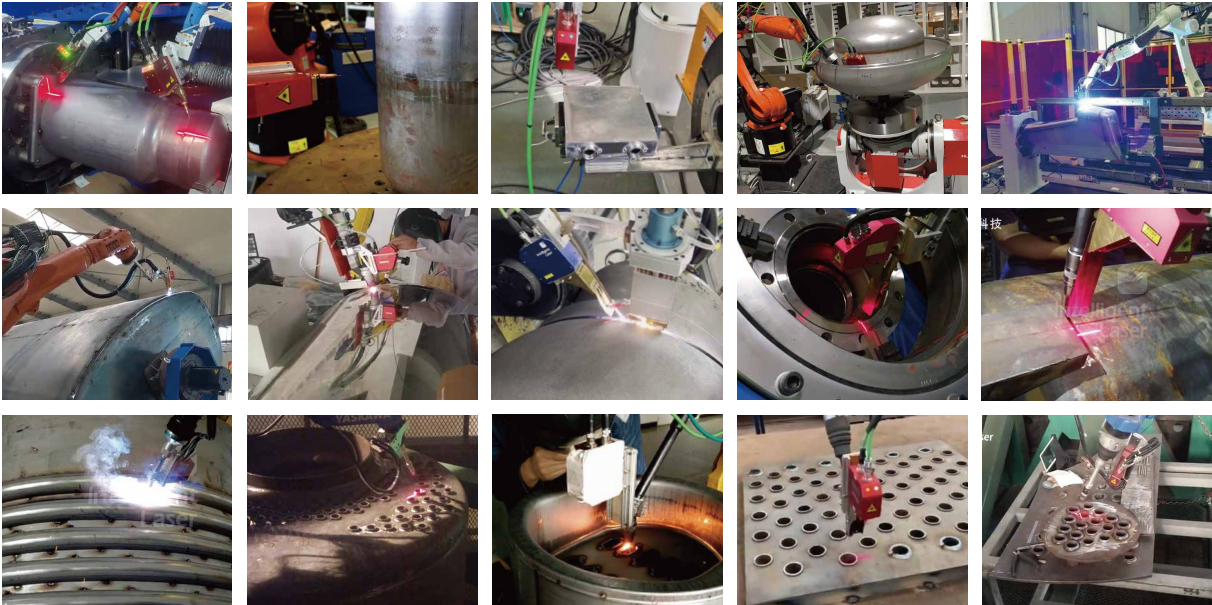
SHEET METAL



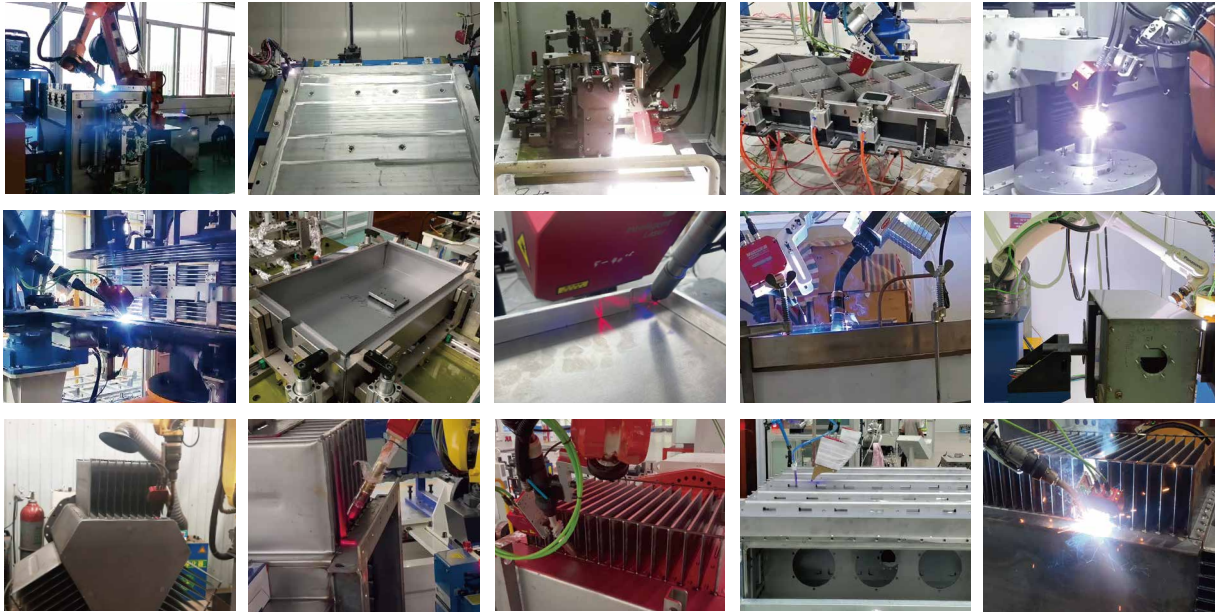
PIPES



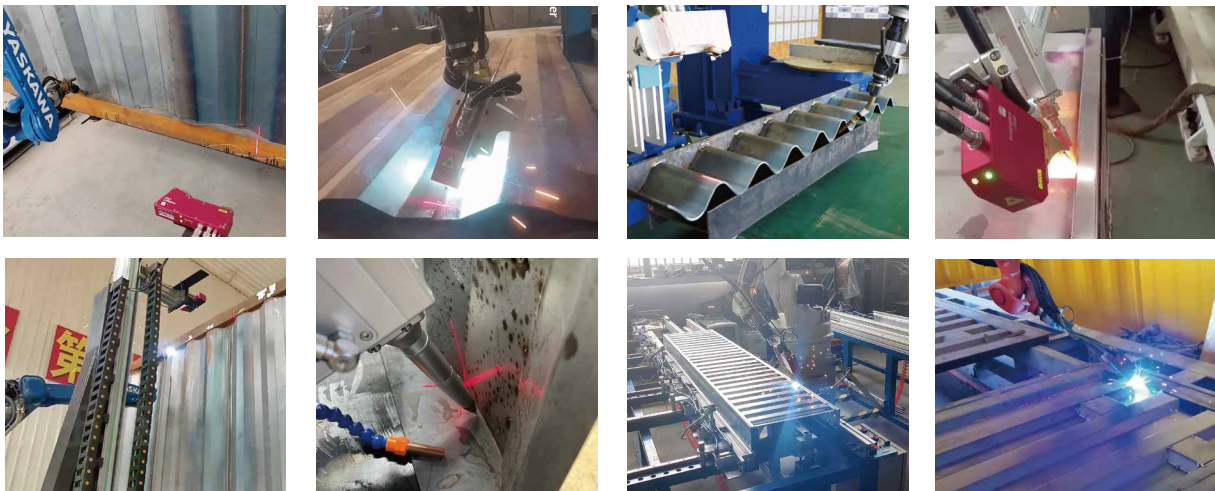
PRESSURE VESSEL



POWER EQUIPMENT



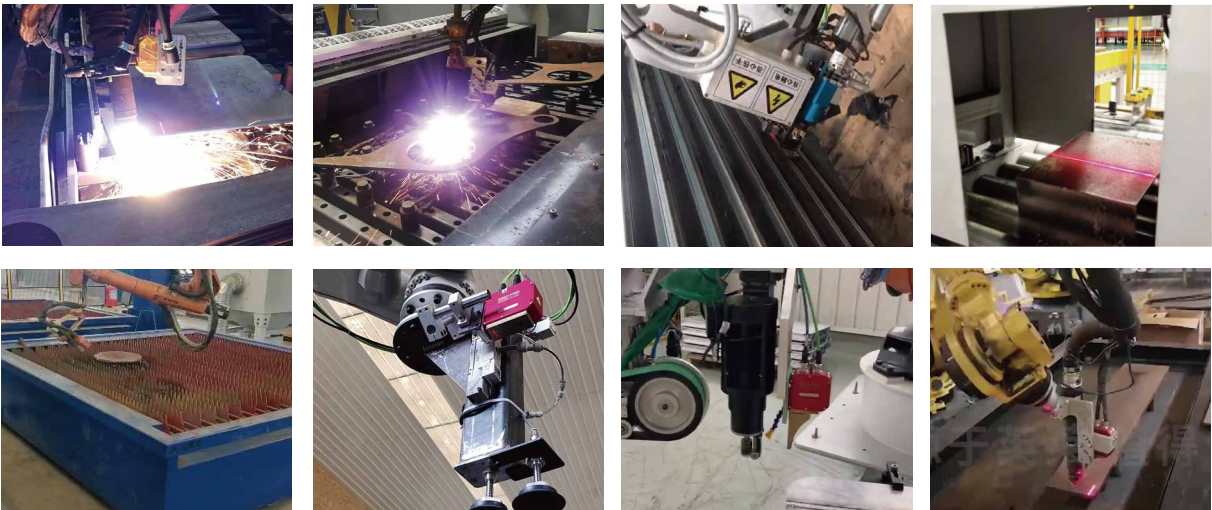
CORRUGATED PLATE

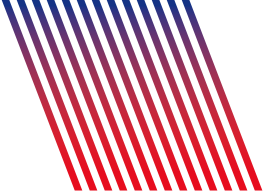


SPECIAL WELD MACHINE



OTHER INDUSTRY





SALES MARKET AND SERVICE

At present, Yinglai has branches in GuangDong, JiangSu. Our company not only focus on promoting R&D capabilities, but also delicate ourselves to our core product - Laser Vision Seam Tracking System. We will always stick to our slogan From Yinglai, Trustworthy!

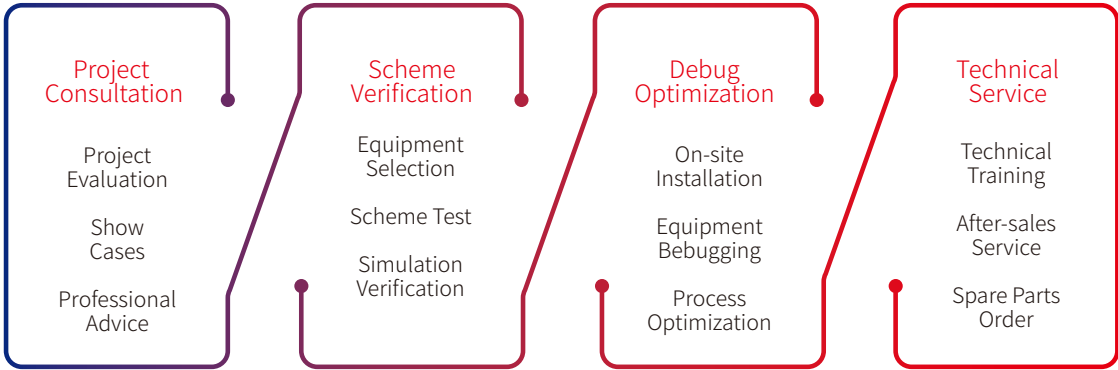






Overseas Department

Now our customers spread all over the world, including Europe, South America, middle East and South pacific region.

CUSTOMERS (PARTIAL DISPLAY)

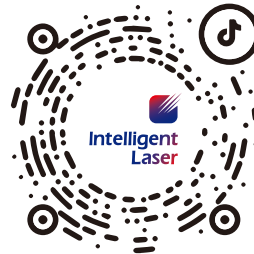
PROJECT SERVICE



- Quality control with high quality 
- Independent product performance 
- Strong production capacity 
- Reliable after-sale service 

YINGLAI IS LOOKING FORWARD TO COOPERATING WITH YOU!

FROM INTELLIGENTLASER, TRUSTWORTHY!



www.intelligent-laser.com

英莱科技

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HEADQUARTER

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